

*This is a memo I did a while
back on the timing of Betzner*

Concerning Betzner Picture and Zapruder Film:

Before determining the relationship of the Betzner Picture to the Zapruder film, it is necessary to first mark Betzner's position in Dealy Plaza.

From the similarity between Betzner's picture and Willis #5, it is obvious that Betzner was standing in the vicinity of the south-east curb of Elm Street at the intersection of Elm and Houston. Two methods were employed to ascertain the exact position of the photographer and the relationship of his picture to the Zapruder film.

First and least reliable was the use of photogram-metric analysis using the Betzner Picture and a Dealy Plaza plat map (C.E.882). This procedure involves the alignment of stationary objects in the picture. Two or more sets of stationary objects must be used. Points were chosen and numbered on the picture (see illustration #1). Lines were drawn on the plat map through these objects as they appear in the photo. (i.e.-In the Betzner picture, a tree directly behind Zapruder falls directly above the north end of the Stemmons Freeway sign. Therefore, on the plat map, a line was drawn from this tree to the north end of the sign and then extended to the south curb of Elm). Wherever these lines of sight intersect is the point where the photographer must have stood. Thus Betzner's exact position was established. In the Betzner picture, Kennedy's head lies directly below a point slightly to the right of the center of the Stemmons sign. On the plat map, a line was drawn from this point on the sign to Betzner's position since Kennedy's position would therefore lie on this line. The line passed through the point on the plat map indicating Kennedy's position at Zapruder frame 186 (as marked by the F.B.I.). See illustration #1. This procedure is least reliable because lines of sight tend to vary very slightly in individual attempts to draw them. Thus there will always be a slight variation in the position of the photographer.

Another far more accurate procedure was employed which first involved locating Betzner in the Zapruder film. Frame 183 from Life, October 2, 1964 and the Betzner picture were used. In scanning the general area of bystanders where Betzner would be expected to be found, I can see only one man who appears to be holding a camera. He's dressed in white or khaki clothes. Although it is difficult to distinguish the people in the crowd, certain factors have led me to believe that this man is Betzner. (see illustration #2) In the immediate foreground of the Betzner picture there can be seen the back of a man with a crewcut and a dark jacket. The right arm of this man is bent so that the part of the arm below the elbow is not visible. In the crowd of bystanders in frame 183, there is only one man who fits this description and he is standing in front of Betzner in such a way that

would cause him to appear in the picture as he does. Also, in Betzner's affidavit (19H467-468), he describes running around the corner of Elm and Houston to come to the position where he took the picture in question. In the first Zapruder frame printed in Life, November 29, 1963, exposed while the motorcade was still on Houston, Betzner cannot be seen on the corner. In the second frame which is about #158, Betzner is still not visible. However, by 166, the next frame, he is in the place where he stands until he goes out of view at 203 at which time he had begun to run again. Considering that he would have had to stop for at least two seconds to take the picture, this accords with Betzner's descriptions of his actions. Thus, I feel secure in saying that the man I have located in frame 183 is Hugh Betzner.

In the Betzner picture, Clint Hill's left shoulder is directly below Zapruder. It would stand that in the Zapruder film, Hill's shoulder would fall below Betzner in the frame corresponding to the Betzner picture. Since we know where Betzner was standing in Zapruder, it is an easy task to find the frame in question. Hill's shoulder lies below Betzner in frames 185-186.

Thus, from two separate methods, it has been ascertained that the Betzner picture was taken at the time when Zapruder frames 185-186 were exposed.

Howard Roffman

